January-22-13 9:19:33 AM

Item ID: D3034-3 Accept *N900040100* Setup Start **Revision ID:** Item Name: Bearnaw Start Date: 1/22/13 **Start Oty: 12.00 Cust Item ID:** Required Date: 2/25/13 Req'd Oty: 12.00 Customer: Reference: Run Process Plan: MLJ Date: 13-01-22 Tooling: Approvals: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Reject Tool # Plan Accept Reject Work Center ID Description **Run Hours** Qty Code Qty Number Stamp Draw Nbr Revision Nbr D3034 **REV C** 120 0.00 FLOW WATER JET *120* B13-1-30 Wateriet 0.00 Memo FLOW CNC Waterjet CUT BLANK AS PER FILE D3034-1 BLANK 1.250 130 HAAS CNC VERTICAL MACHINING #1 *130* HAAS 1 Memo HAAS CNC vertical machine #1 1- Mill as per Folio FB109 Folio Rev: AA Dwg D3034 Rev: 2-Deburr per dwg D3034

-			
NCR:	Yes	,	Nο
NUR:	162	/	INO

										•	DQA:	Date	e:
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORM	MANCE / UP	DATE	·		
											QA Closed:	Date	e:
Vork Ord	er:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part NCR	No.					Rework Scrap Use-as-is Work Order Update		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	ı	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	1	nitial	Ac	tion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
oc/Data uip/Tooling perator aterial etup ther occess upplier									·				
aining napproved	_												
арргочес	<u> </u>			1		F	AUL	T CATE	LGC:RY				
Landi	ng (Gear				General							
		Bending				Bend		Grain			Ovalized		Pressure/Forced
		Centre No	t Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	L	Cracks				Broken/Damaged		Inspect	on Incomplete		Part Incorre	ct	Weld
	L.	Crushed/0	Crimped.			Burrs		Instruct	ions Incomplete/	'Unclear	Part Lost/Mi	issing [Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance		Part Moved		
	_	Heat Trea				Countersink		Mislabe			Positioned V		
	$ldsymbol{le}}}}}}$	Inspection	•	Tube		Cut Too Short	_	Misread	i		Power Loss/	Surge [Other
		Ripples in				Drill Holes		Offset				···	
		Torque W	aves in E	xtrusio	n	Drawing		Out of 0	Calibration				

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Packaging

Memo

Page 2

January-22-13 9:19:33 AM Item ID: D3034-3 Accept *N900040100* Setup Start **Revision ID:** Item Name: Bearpaw **Start Date: Start Qty: 12.00** *12* 1/22/13 **Cust Item ID:** Required Date: 2/25/13 Req'd Qty: 12.00 **Customer:** Reference: Run Process Plan: Date: Tooling: **Approvals:** Date: Stop Date:_____ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. **Work Center ID** Description Run Hours DA? Code Qty Otv Number Stamp 140 QC2- Inspect parts off machine FAI/FAIB 2013-02-15. *140* Memo Quality Control 150 QC8- Inspect parts - second check 0.00 SP B.2-25 14 QC 0.00 Memo Quality Control 151 Identify as per dwg & Stock Location: 0.00 *151* Packaging 0.00

DQA: ____ Date: ____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

NCN.	C 3	/ NO				WORK ORDER NON-C		INFINEL / OF C	DAIL	QA Closed:	Date	e:
Work Orde	r:					DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part N	-					Rework Scrap		Skid-tube Machining	Crosstube Small Fab		Water Jet d. Eng. Coor.	Engineering Quality
NCR N	lo					Use-as-is Work Order Update	Ther	moforming Large Fab	Finishing Composite	Rec/Stor	re/Packaging Supplier	Other
Root					Descri	ption of work order update	Initial	Act	tion	Sign &		
Cause		Date	Step '	Qty	(or Non-conformance	Chief En	g Descr	ription	Date	Verification	QC Inspector
oc/Data		I										
quip/Tooling												
perator												
/laterial												
etup												
Other	7											
rocess												
upplier												
raining												
Jnapproved												
•	•	•				F.	AULT CAT	EGORY				
Landin	ıg Ge	ear				General						
ſ	E	Bending				Bend	Grain			Ovalized		Pressure/Forced
		entre No	t Concer	ntric to (o/s	BOM/Route	Hardv	<i>r</i> are		Over/Under	tolerance	Temperature/Cure
1	\neg	Cracks				Broken/Damaged	Inspec	tion Incomplete		Part Incorre	<u>}-</u>	Weld
ľ	\exists	Crushed/C	rimped.			Burrs	—	ctions Incomplete/l	Unclear	Part Lost/M	issing	Wrong Stock Pulled
Ţ	_	Cuffs	•			Contamination	—	tenance		Part Moved	_	
ľ	 -	leat Treat	t			Countersink	Mislal	peled		Positioned V	Vrong	
ļ	-	nspection		Tube		Cut Too Short	Misre	ad		Power Loss/		Other
ļ	_	Ripples in				Drill Holes	Offset		L		- L	
ľ		orque W		xtrusior	,	Drawing		Calibration				
<u> </u>	_	urning Se				Finish	\vdash	Sequence				
Ì	_	Nave/Twi		e		Folio		le Dimensions				

January-22-13 9:19:33 AM

96275

Page 3

Item ID: Revision ID: Item Name:	D3034-3 Bearpaw			Accept	*N900	040	100)* :	Setup	Start Stop	171.	S1* S2*	
Start Date: Required Date: Reference:	1/22/13 : 2/25/13	Start Qty: 12.00 Req'd Qty: 12.00	*12* *12*		Cust Item I Customer:	D:							
Approvals:	Process Pl QC:	an:	Date:	Tooling: SPC (Y/N):		ate:		J	Run	Start Stop	*N *N	R1* R2*	
Sequence ID/ Work Center I 190 *1 QC Quality Control	D	Operation Description QC21- Final Inspection - Memo	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number / 3/5	Insp. Stamp	

DQA: Date:

N	ICR		Voc	/	No
١	ICK	:	Yes .	/	INC

NCR: Y	es / No				WORK ORDER NON-C	CONFO	RMANCE / UP	DATE	QA Closed:	Date	e:
Work Orde	r:	•			DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part N					Rework Scrap		Skid-tube Machining	Crosstube Small Fab	4	Water Jet d. Eng. Coor.	Engineering Quality
NCR N	lo				Use-as-is Work Order Update	The	rmoforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root					ption of work order update	Initial		tion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief Er	g Desc	cription	Date	Verification	QC Inspector
Ooc/Data quip/Tooling Operator											
Material											
ietup											
Other											
Process											
Supplier											
Fraining											
Jnapproved						<u> </u>					
						AULT CAT	EGCIRY		,		
Landir	ng Gear				General			[7	_	
	Bending				Bend	Grain		<u></u>	Ovalized		Pressure/Forced
		lot Conce	ntric to (D/S _	BOM/Route	Hard		<u> </u>	Over/Under	⊢	Temperature/Cure
	Cracks			-	Broken/Damaged	_	ction Incomplete		Part Incorre	<u>-</u>	Weld
-		/Crimped			Burrs		ctions incomplete/	'Unclear	Part Lost/M	issing	Wrong Stock Pulled
ŀ	Cuffs			-	Contamination		tenance	<u> </u>	Part Moved	A 4	
}	Heat Tre		T. L.	-	Countersink	Misla		<u> </u>	Positioned \		
}		on Strip in	ıupe	<u> </u>	Cut Too Short	Misre			Power Loss/	Surge	Other
	Ripples		·	_	Drill Holes	Offse				· · · · · · · · · · · · · · · · · · ·	
}		Vaves in E		' ├ ─	Drawing	\vdash	f Calibration				
-		Sequence		<u> </u>	Finish	\vdash	f Sequence				
1	[Wave/Ti	vist in Tul	oe -	ı	Folio	Outsi	de Dimensions				

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Picklist Print

January-22-13 9:19:36 AM

Work Order ID: 96275

Parent Item:

D3034-3

Parent Item Name: Bearpaw

96275

D3034-3

Start Date: 1/22/13

Required Date: 2/25/13

Start Qty: 12.00

Required Qty: 12.00

Comments:

IP REV:A NEW ISSUE 12-04-12 JLM VERIFIED BY:DD

IPP

REV:B NOW 1.25" MAT 12-10-15 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB1.250		Purchased	No				sf	320.0000	· · · · · · · · · · · · · · · · · · ·	49.92	90,		
MUHMWB 1.250 BLACK	R1 250	•							**		B13-	1-27	

Location Loc Oty Loc Code MAT019 320 123290 320

DQA: Date: **WORK ORDER NON-CONFORMANCE / UPDATE** NCR: Yes / No QA Closed: Date: DISPOSITION **AGAINST DEPARTMENT/PROCESS** Work Order: Skid-tube Crosstube Engineering Rework Water Jet Prod. Eng. Coor. Quality Part No. Machining Small Fab Scrap Thermoforming Rec/Store/Packaging Other Finishing Use-as-is NCR No. Work Order Update Large Fab Composite Supplier Description of work order update Action Sign & Initial Root Description Verification Date Qtv or Non-conformance Chief Eng Date QC Inspector Cause Step Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved **FAULT CATEGORY Landing Gear** General Ovalized Pressure/Forced Bending Bend Grain Centre Not Concentric to O/S BOM/Route Hardware Over/Under tolerance Temperature/Cure Cracks Broken/Damaged Inspection Incomplete Part Incorrect Weld Wrong Stock Pulled Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Lost/Missing Cuffs Maintenance Part Moved Contamination Heat Treat Countersink Mislabeled Positioned Wrong

Misread

Out of Calibration

Out of Secuence

Outside Dimensions

Offset

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

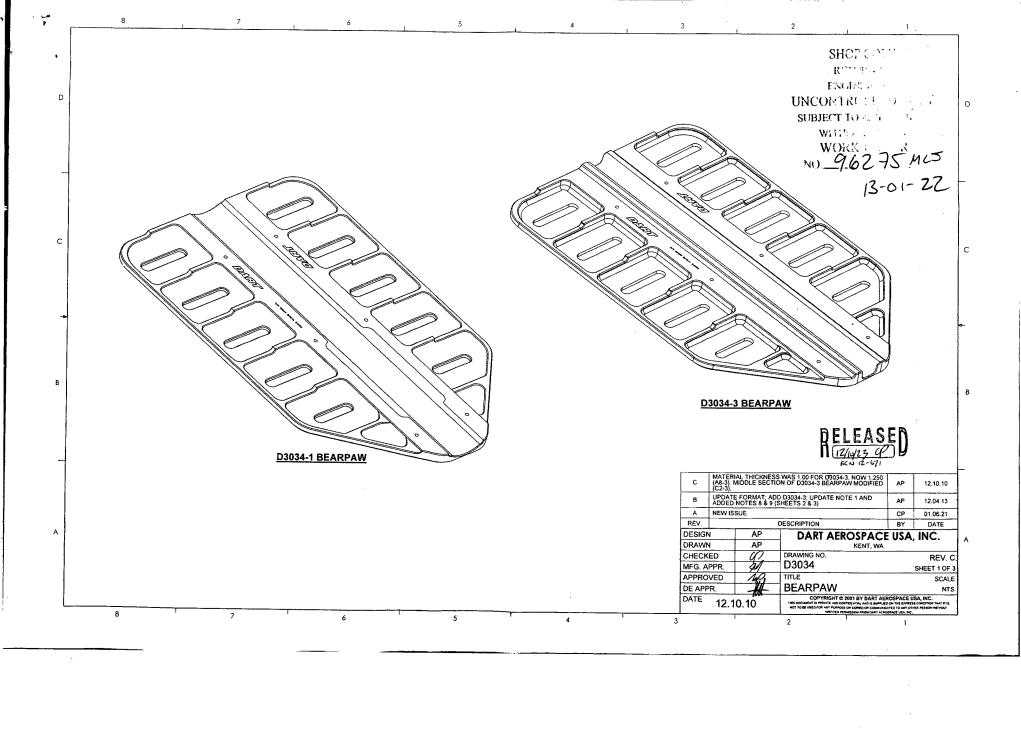
DART AEROSPACE LTD	Work Order: 96275	
Description: Ben pur	Part Number: 3034-3	
Inspection Dwg: 13054 Rev:	Page 1 of 1	

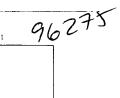
FIRST ARTICLE INSPECTION CHECKLIST

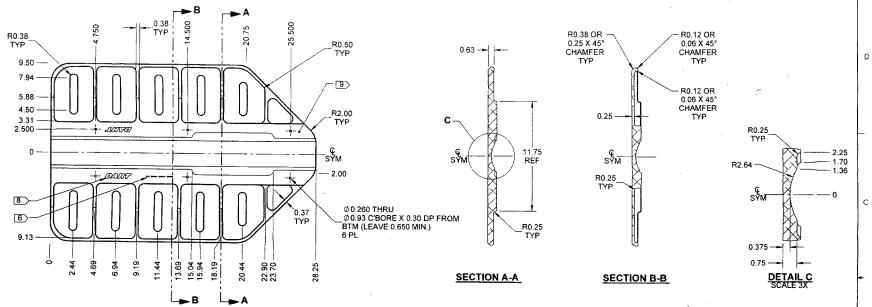
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø.260		.260	~			
0-930	7030 7030	.932				
.30	4070	-316				
	·			<u> </u>		
· · · · · · · · · · · · · · · · · · ·						
•.						

Measured by:	Audited by:	Preliminary Approval:
Date: (3 02-18	Date: 3.2.25	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	<u> </u>







0.950 REF

D3034-1 BEARPAW

NOTES:
1) MATERIAL: UHMW BLACK TIVAR 1000 VIRGIN MATERIAL, 1.000 THICK MACHINED TO 0.950 (REF DART SPEC. MUHMWB100)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: ENGRAVE PART NUMBER "D3034-1" AND BATCH NUMBER "BXXXXX" IN ACCORDANCE WITH QSI 044 METHOD 6.3

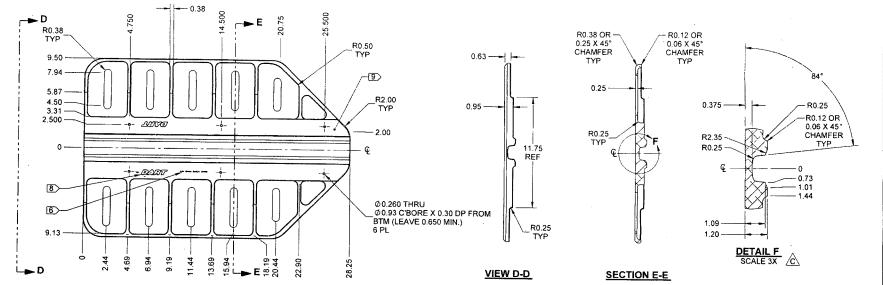
D

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7) WEIGHT: 7.56 Ibs
8) ENGRAVE DART-LOGO TO MAX DEPTH OF 0.012
9) APPLY R0.12 RADIUS OR 0.06 x 45" CHAMFER TO ALL EDGES ON SIDE SHOWN UNLESS OTHERWISE INDICATED 10) PROFILE PER DRAWING FILE "D3034-1-REVC.STP"

DESIGN	AP	DART AEROSPAC	CE USA, INC.
DRAWN	AP	KENT, W	/A
CHECKED	a.	DRAWING NO.	REV, C
MFG. APPR.	94	D3034	SHEET 2 OF 3
APPROVED	MA	TITLE	SCALE
DE APPR.		BEARPAW	NTS
DATE 12.1	0.10	COPYRIGHT © 2001 BY DART THE DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS OUR NOT TO BILLUSCO FOR ANY PURPOSE ON COPIED OR COM- WRITTER PRIVATE OF PRIVATE OF PROPERTY.	MPURED ON THE EXPRESS CONCITION THAT IT IS MANICATED TO ANY OTHER PERSON WITHOUT

96275





D3034-3 BEARPAW

NOTES:

1) MATERIAL: UHMW BLACK TIVAR 1000 VIRGIN MATERIAL, 1.25 THICK MACHINED TO 1.20 (REF DART SPEC. MUHMWB125)

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: ENGRAVE PART NUMBER "D3034-3" AND BATCH NUMBER "BXXXXX" IN ACCORDANCE WITH QSI 044 METHOD 6.3

D

С

7) Weight 1: 8.59 ibs 8) ENGRAVE DART LOGO TO MAX DEPTH OF 0.012 9) APPLY R0.12 RADIUS OR 0.06 x 45" CHAMFER TO ALL EDGES ON SIDE SHOWN UNLESS OTHERWISE INDICATED 10) PROFILE PER DRAWING FILE "D3034-3-REVC.STP"

DESIGN	AP	DART AEROSPACE USA, INC.			
DRAWN	AP	KENT, WA			
CHECKED	a.	DRAWING NO.	REV. C		
MFG. APPR.	GU/	D3034	SHEET 3 OF 3		
APPROVED	140	TITLE	SCALE		
DE APPR.	-4	BEARPAW	NTS		
DATE 12.10.10		COPYRIGHT © 2001 BY DART AEROSPACE USA, INC. THIS COCUMENT BY PRIVATE AND CONTROL THAN AND IS SUPPLIED ON THE EXPRESS CONCRITION THAT IT IS NOT TO BE USED YOU ANY FURPOOR OF COPIED ON COMMUNICATION TO ANY OTHER REPORT WITHOUT WAITTEN PRIVATEOUS THOM DART ARROWANCE USA, INC.			

DART AEROSPACE LTD	Work Order: 96275	
Description: Bear Paw	Part Number: 3034-	3
Inspection Dwg: 3034 Rev:	Page 1 of 1	<u> </u>

FIRST ARTICLE INSPECTION CHECKLIST

Drawing	Tolerance	Actual	Accept	Reject	Method of Inspection	Comments
Dimension	7 212	Dimension				2-11
2.500	4/- ,010	2.499			vern	27-4 27-10
3.71	+/030		~		Type	41-10
5.87	1/. 030	5.87	V			
9.50	7.,030	9.50				
4.750	1/010	4.749	V			
. 38	t/030	.377	1			
14.500	4.010	14,700	7			
25.500	t/010	25,500	7			
28.25	4-,030	28.25	<u></u>			
-63	4.030	.640	<u> </u>			
11.75	1/030	11.75				
. 95	t/030	. 962				
.25 x 45°	1/030	.237				
.06 x 45°	7030	.052				
.25	7.030	. 253				
.325	7.010	.383				
-73	4.030	.725				
1.01	4.030	1.006				
1-44	4.030	1.501				
1.20	1/ 1-2H.070	1.21				
4.049	•					
1.09	1/03	1.097				

Measured by: 88	Audited by:	Preliminary Approval:	
Date: (3-01-18	Date: 13 . 7 - 25	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	